

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : 1794  
Examiner : Kelly J. Bekker  
Applicants : Cheree L. B. Stevens et al.  
Appln. No. : 10/629,991  
Filing Date : July 30, 2003  
Confirmation No. : 3726  
For : EXTERNAL COATING COMPOSITION FOR TOASTER  
PASTRIES AND OTHER PASTRY PRODUCTS

THIRD DECLARATION OF CHEREE L. B. STEVENS

I, Cheree L. B. Stevens, do hereby declare as follows:

1. I am the Director of Technical Services for Advanced Food Technologies, assignee of the present patent application. I graduated from the College of Bakery & Food Technology at South Glamorgan Institute with a Food Technology Degree. I have had over 20 years experience in the food science industry. I have had extensive experience specifically in the food coatings area for over 14 years, since 1992.

2. From 1984 to 1986, I was the Production Supervisor for W. L. Miller's & Sons, where I managed employees in the production of bacon and ham and reduced pack weight problems through controls developed for the cook process. From 1986 to 1989, I was the Product Development Technologist for Reckitt and Colman, where I formulated twelve varieties of soft drinks using three different packaging technologies that created at least \$5 million in profit. I also developed matches to competitor products increasing market share and conducted supplier quality audits. From 1989 to 1991, I was the Senior Research Scientist for British Sugar Corporation, where I developed a soluble fiber-enriched soft drink and soluble fiber enriched meat additive using beet fiber. I also developed a novel food product using 'horizon' technology, initiated government petition for acceptance, commissioned a new manufacturing facility that ran above efficiency and utilized total quality management (TQM) and team dynamics to ensure project probability. From 1992 to 1994, I was a Food Scientist for McCain Foods, Inc., where I developed various products, including a French fry that holds over 20 minutes under a heat lamp. I also assisted in launching a specialized coated French fry line resulting in

\$200 million of additional sales, commercialized a signature French fry line resulting in \$30 million sales, commercialized the first flavored marinade French fry line valued at \$10 million and obtained patent protection, and developed specification and other procedures to obtain product launches. From 1994 to 1998, I was the Product Process Specialist for the Pillsbury Company, where I was responsible for ensuring process and packaging parameters. Among other responsibilities, I also implemented SPC for granule processing and packaging resulting in a 90% reduction in off-grade and reducing overweight pouches, developed Allergen control program, created SOP's for process and packaging operators, and audited BOMs and GMPs for accuracy. From 1998 to 1999, I was the Manager of Technical Services for Basic American Foods, where I managed the Plant Sanitarian, the Quality Assurance Lab Supervisor, 11 technicians and 6 sanitation personnel for potato dehydration, blending and packaging operation. I was also responsible for all Quality Assurance, developing the "Best Practices" identified by Pillsbury and Tricon audits, received Supplier of the Year awards, and developed Corrective Action system.

3. From 1999 to date, I have served as the Director of Technical Services for Advanced Food Technologies, Inc. A copy of my resume is attached hereto as Exhibit A.

4. I am a named inventor of U.S. Patent Application Serial No. 10/629,991.

5. I have carefully reviewed the Office Action mailed June 2, 2010, in United States Patent Application Serial No. 10/629,991, and the references cited therein, including Lazard et al. (EP 0547551 AI).

6. During the week of October 20, 2010, I personally conducted experiments regarding the coating of the coating compositions of the Lazard et al. published application.

7. In conducting the experiments, the following formulas were prepared to show various amounts of glycerol (plasticizer) using the Lazard composition parameters that do not include fat, which is an optional ingredient. The general parameters of such a composition are described at page 4, line 20 of the '551 publication to Lazard et al. The following lipid free formulas were prepared:

Test A = 35% starch, 5% gelatin, 10% plasticizer (glycerol), 50% water

Test B = 18% starch, 5% gelatin, 27.5% plasticizer (glycerol), 49.5% water

Test C = 18% starch, 5% gelatin, 45% plasticizer (glycerol), 32% water

Ingredient	Test A		Test B	
	% by weight	Batch weight (g)	% by weight	Batch weight (g)
Gelatin	5.0	25.0	5.0	25.0
Glycerol	10.0	50.0	27.5	137.5
Flojel starch*	35.0	175.0	18.0	90.0
Water	50.0	250.0	49.5	247.5
TOTAL	100.0	500.0	100.0	500.0

Ingredient	Test C	
	% by weight	Batch weight (g)
Gelatin	5.0	25.0
Glycerol	45.0	225.0
Flojel starch*	18.0	90.0
Water	32.0	160.0
TOTAL	100.0	500.0

8. Photographs taken during the process of applying composition A-C are attached as Exhibit B. The composition of the Lazard et al. application as shown in Exhibit C results in an obviously visible coating that clearly detracts from the appearance of the toaster pastries.

9. To test the compositions above (Test A-C), I used the following process:

- A. Obtain non-frosted Kellogg Pop Tarts Toaster Pastries (strawberry flavored, Lot MAY0211 CPA1 10:53) Remove from packaging and set aside.
- B. Prepare Lazard's edible films by adding ingredients to hot water and then heating to 80°C as discussed in the Lazard et al. application. Prepare the solution using a 500ml glass beaker sitting on hot plate (no heat) and a standard bench top stirrer positioned overhead. Once a homogenous mixture is observed, turn hot plate to setting 8 in order to heat solution to 80°C.
- C. Spray toaster pastry with tepid water on both sides to reconstitute the surface so that the coating can adhere.
- D. Let the damp toaster pastry sit for a few minutes.
- E. Lay the damp pastry in a pool of edible film (solution @ 80°C), stand on its side to drain excess coating, place on foil lined tray with oil sprayed on it.
- F. Bake at 350°F for 15 minutes.

10. Notes: All of the films that contain gelatin were very thick and would not drain off of the pastry during the coating process. The Test B formula had to be smeared on by hand. The coated pastry was held up to allow excess coating to drip, however, very little dripped off. The wet coatings were sticky and mucus-like. The finished baked toaster pastries incorporating the gelatin and glycerol were hardly recognizable as toaster pastries. Test A resulted in a white, lumpy coating that pooled in depressed areas of the pastry. Test B resulted in toaster pastries that had a wet, soft, cracked discontinuous coating. Test C gave a coating that burned in the oven, became dark, had latex rubber-like texture, and peeled off of the surface. The film was tough, plastic-like, and visible.

11. The slurries of Lazard et al. application Tests A-C would not flow through a stein cup having an opening at the bottom which is 0.310' in diameter. Tests A-C were too thick to flow or contained "frog spawn" lumps (were not homogeneous).

12. All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true, and further, these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

Nov 29, 2010

Date

Cheree L. Boudreau Stevens

Cheree L. B. Stevens

# **EXHIBIT A**

# **CHEREE L. B. STEVENS**

200 Cobblestone Lane • Idaho Falls, Idaho 83404 • (208) 529-9027

## **OBJECTIVE**

Management position in food-related quality and R&D

## **PROFESSIONAL SUMMARY**

Manager with 15 years of Quality, R&D and Operations management experience. Demonstrated ability to structure innovative and unique solutions to complex problems. Proven ability to develop quality teams that motivate others to their peak performance and reduce execution time.

## **CAREER HISTORY**

### **BASIC AMERICAN FOODS**

Shelly, Idaho

1998 – 1999

#### **MANAGER, TECHNICAL SERVICES**

- Managed Plant Sanitarian, QA Lab Supervisor and 11 technicians, 6 sanitation personnel for a 7 day 24 hour potato dehydration, blending and packaging operation. (8 flake drums, 4 granule lines, slice line, agglomerate line, 9 packaging lines)
- Responsible for all Quality Assurance issues including:
  - Customer required quality systems (Pillsbury, Tricon, Sysco)
  - Food Safety, Allergens, HACCP, GMP's, Continuous Improvement, SPC, Sanitation
  - Third party audits, including Kosher certification
- Developed "Best Practices" identified by Pillsbury and Tricon audits, received Supplier of the Year awards.
- Developed Corrective Action system

### **THE PILLSBURY COMPANY**

Shelly, Idaho

1994 – 1998

#### **PRODUCT PROCESS SPECIALIST**

- Responsible for ensuring process and packaging parameters met specified limits.
- Implemented SPC for granule processes resulting in a 90% reduction in off-grade
- Implemented SPC for granule packaging lines reducing over weight pouches
- Developed Allergen control program
- Created SOP's for Process and Packaging Operators, trained operators and QA techs
- Communicated Quality and Production data to management and hourly employees. Consistently met business goals relating to quality, cost and safety
- Audited BOMs for accuracy
- Conducted GMP audits, responsible for corrective actions
- Member of Granule HACCP Team, Product Recall Team (conducted mock recalls quarterly)
- Reduced costs in several areas including ingredient usage, off-grade reduction, reformulations, labor
- Created quality programs to meet customer required quality systems.

### **MCCAIN FOODS, INC.**

Frozen Foods Division – Othello Washington

1992 – 1994

#### **FOOD SCIENTIST**

- Developed a 1-minute French fry that holds over 20 minutes under heat lamp.
- Assisted in launching a specialized coated French fry line, resulting in 200MM additional sales pounds.
- Commercialized signature French fry line, resulting in \$30,000,000 sales.
- Commercialized first flavored marinade French fry line valued at \$10,000,000, obtaining patent.
- Developed specifications, nutrition, process procedures, and analytical testing to obtain product launches

# **CHEREE L.B. STEVENS**

## **BRITISH SUGAR CORPORATION**

Sugar Products Division - Norwich, England

1989 - 1991

### **SENIOR RESEARCH SCIENTIST**

- Developed a soluble fiber-enriched soft drink and soluble fiber enriched meat additive using beet fiber.
- Developed a novel food product using "horizon" technology and initiated government petition for acceptance.
- Commissioned a new manufacturing facility and ran at above efficiency.
- Utilized TQM, and team dynamics to ensure project probability.

## **RECKITT AND COLMAN**

Colman's of Norwich, Norwich, England

1986 - 1989

### **PRODUCT DEVELOPMENT TECHNOLOGIST**

- Formulated 12 varieties of soft drinks using three different packaging technologies, \$5MM profit
- Developed matches to competitor products, increased market share
- Conducted Supplier Quality audits

## **W.L. MILLER'S & SONS**

Meat Products Division - Poole, England

1984 - 1986

### **PRODUCTION SUPERVISOR**

- Managed 10 hourly employees in the production of bacon and ham
- Reduced peck weight problems through controls developed for the cook process.

### **EDUCATION**

South Glamorgan Institute  
The College of Bakery & Food Technology

Higher National Diploma  
(Food Technology)

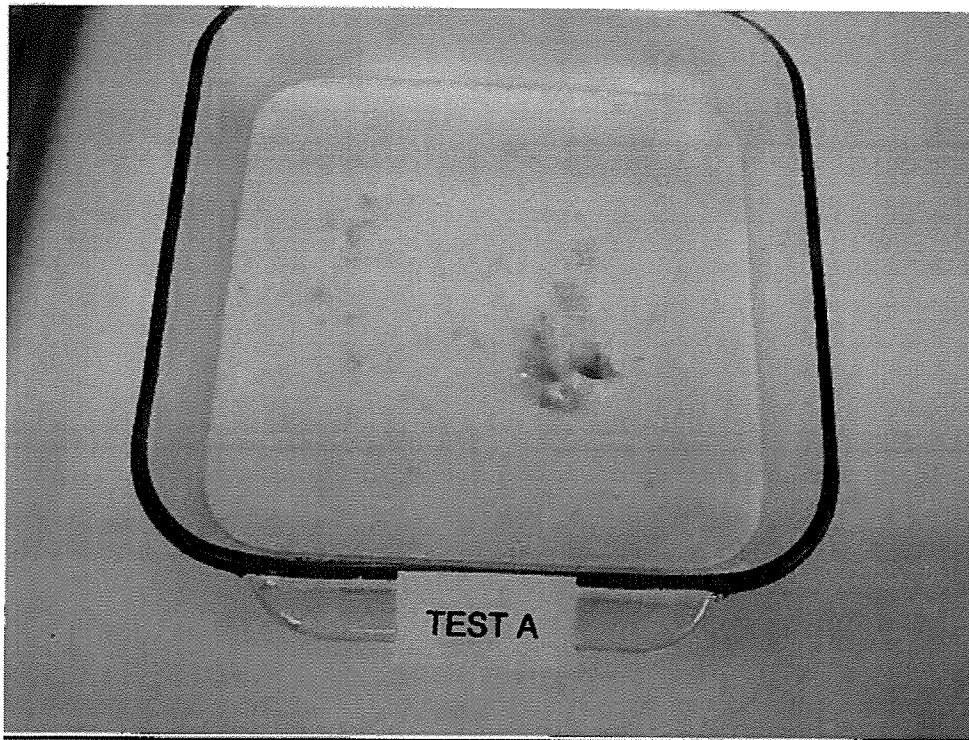
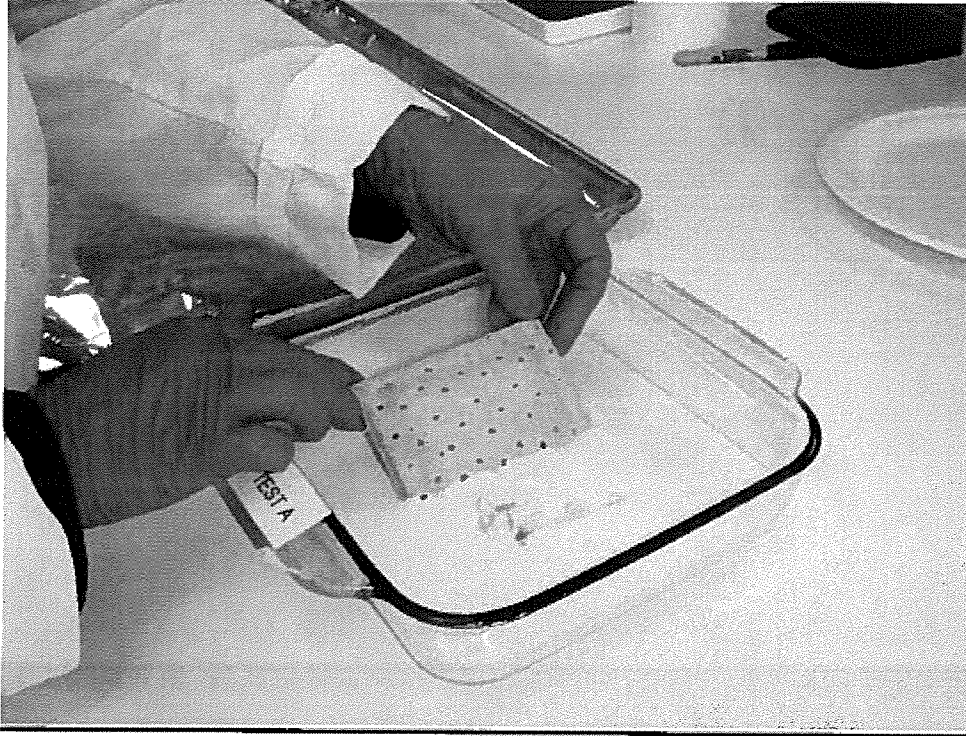
### **REFERENCES FURNISHED UPON REQUEST**



## **EXHIBIT B**

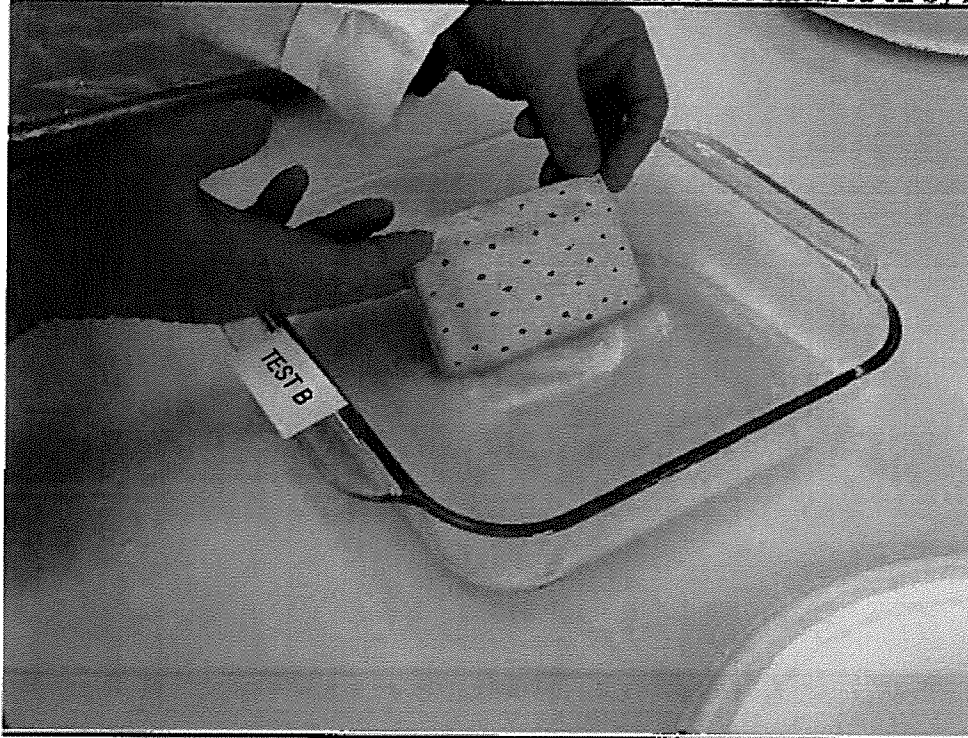
External Coating Composition for Toaster Pastries – With Lazard Invention  
C Stevens 10/28/10

**Note the large gel lumps in the coating**



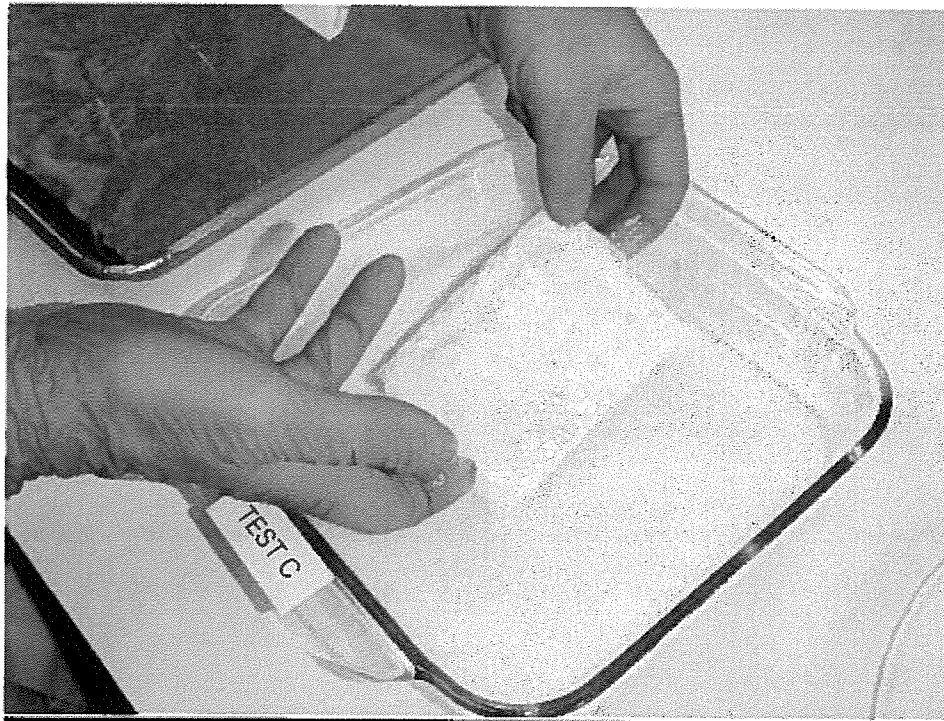
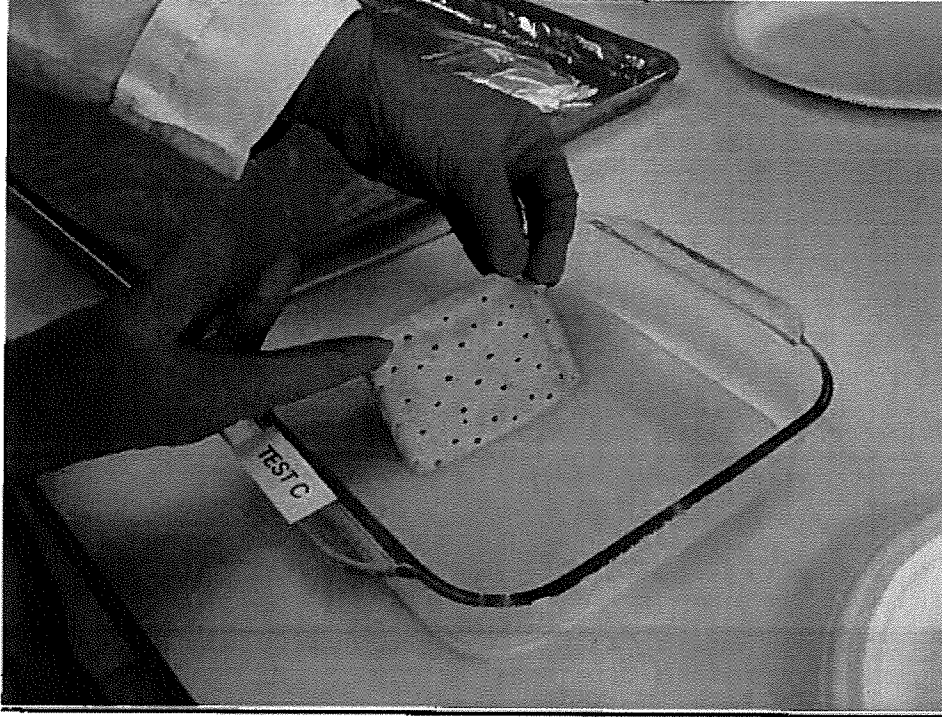
External Coating Composition for Toaster Pastries – With Lazard Invention  
C Stevens 10/28/10

**The coating was very mucus-like and thick and had to be smeared on by hand**



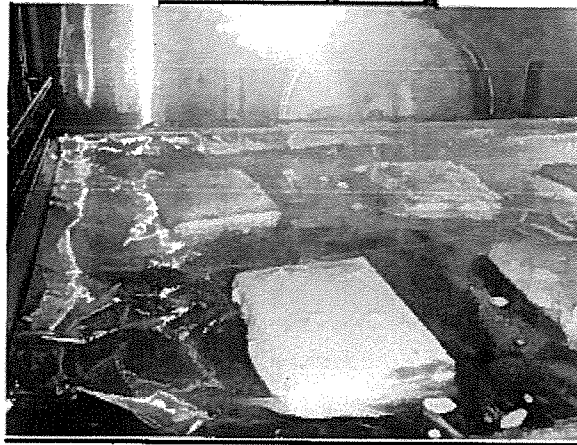
External Coating Composition for Toaster Pastries – With Lazard Invention  
C Stevens 10/28/10

**The coating gave a white, cloudy, uneven coating**





**Test A during baking**



**Test B during baking**



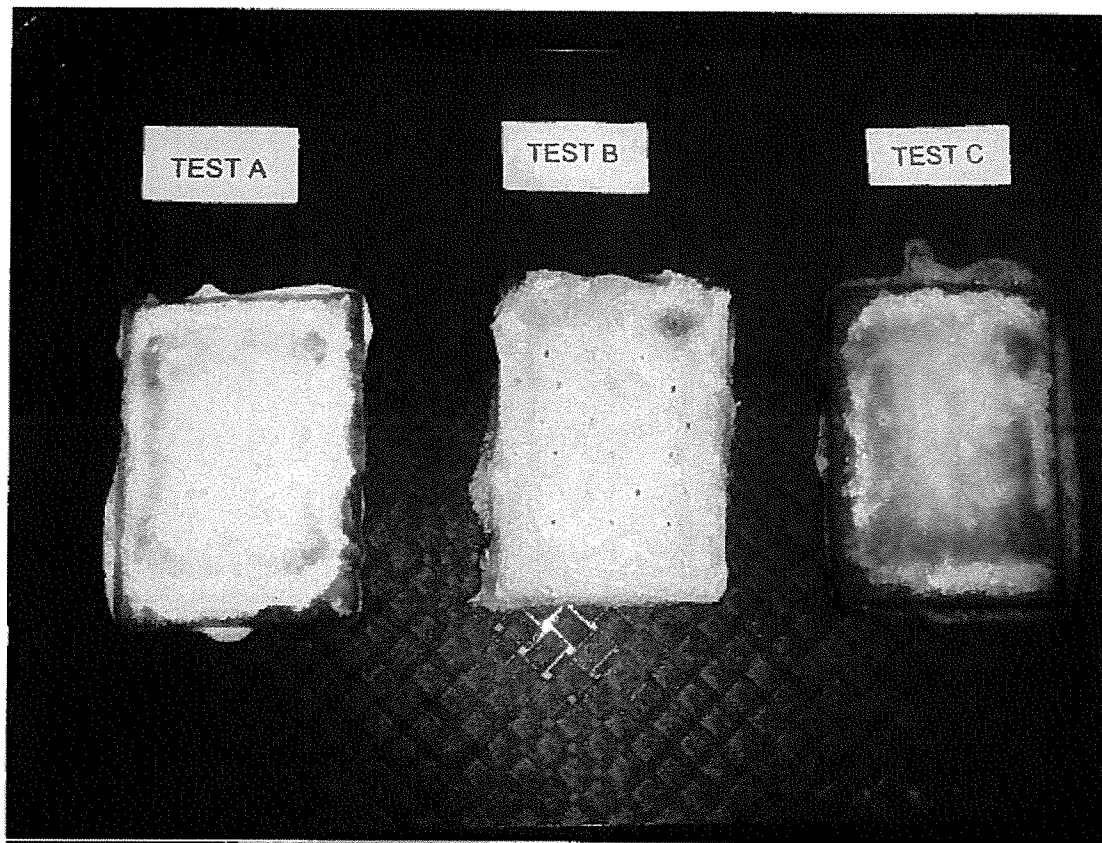
**Test C during baking**



## **EXHIBIT C**

External Coating Composition for Toaster Pastries – With Lazard Invention	
C Stevens	10/28/10

**Finished baked, coated toaster pastries**



**Signed:**      **Cheree L. B. Stevens**

**Date:**   **Oct. 28, 2010**

**Signed:**      **John F. Stevens**

**Date:**   **Oct. 28, 2010**